

now that the N. P. is giving such prosperity to our country.

As Teachers are often the leading spirits in educational matters in rural sections more might be done in establishing School Libraries. Through the praiseworthy efforts of my predecessor, my pupils have access to a large and well selected Library. To the earnest

teacher many ways of fostering this love of reading will suggest themselves, and though the majority of our pupils may not have the benefit of a lengthened school course, if the habit of general reading be thoroughly established, a foundation is laid upon which a liberal education will be built. Let us then, labor diligently to secure this end, and great will be our reward.

HEALTH DEPARTMENT.

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THE SCHOLAR'S EYE.

III.

SHORTSIGHTEDNESS.

Preliminary Optical Experiment.

Analogue of do. in the Eye.

Application of do. to Myopia.

Use of Concave Glasses.

Nature of Shortsightedness.

Its mode of production and increase.

Period of life when it prevails.

Statistics.

Before entering into an explanation of the defects of refraction in the human eye, it is necessary to premise the following optical experiment:—Take a convex lens and place it in a hole in the shutter of a darkened room. If the rays of the sun be allowed to pass through it they will be caused to converge by the lens to form an exceedingly bright and rather warm spot, to be received upon a movable curtain. This spot or point is called the focus (Latin, *focus*, fire-place) of the lens. If the experiment be performed at night, and a lamp or some luminous point be substituted for the sun, the same bright point will be

observed. The position of the point will depend upon the distance of the lamp in front of the lens. As the lamp approaches the lens the focus recedes. The flame of the lamp must move in the right line, called the axis of the lens. If the lens chosen be that called a 3-inch one, the sun's rays will focus at 3 inches behind the centre of the lens. This is called its *principal focus*. The principal focus of a lens is the focus for rays that are parallel, that is, emitted by a light (as the sun) at a (comparatively) infinite distance. As our lamp approaches our 3-inch lens, the focus recedes through 3, 3½, 4, 5, 6 inches until, when the light is at 3-inches from the lens, or at the principal focus in front, our moving bright focus is at an infinite distance, or the rays leave the lens parallel. If our lamp be 20 or more feet distant, its rays will be sufficiently near parallel for all practical purposes. Removing it to such a distance we observe the bright point, or focus, to be just a trifle beyond 3 inches from the centre of the lens. If, now, we place another convex lens between the